AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

Listing of the Claims

1. (Original) A method for improving the luminescent efficiency of semiconductor nanocrystals which comprises surface-treating the semiconductor nanocrystals with a reducing agent.

2. (Original) The method of claim 1, wherein the semiconductor nanocrystals are synthesized by a wet chemistry method.

3. (Currently Amended) The method according to claim 1, wherein the semiconductor nanocrystals are core-shell, alloy or gradient structures made of at least one material selected from the group consisting of CdS, CdSe~~CDSe~~, CdTe, ,ZnS, ZnSe, ZnTe, HgS, HgSe, HgTe, GaN, GaP, GaAs, InP and InAs.

4. (Currently Amended) The method according to claim 1, wherein the reducing agent is a hydride ion-generating salt, an organic reducing agent, a reducing gas or solution containing the gas. ~~such as~~

~~sodium borohydride, lithium borohydride, lithium aluminum hydride, hydrazine, hydrogen gas, hydrogen sulfide or and ammonia.~~

5. (Currently Amended) The method according to claim 1, wherein the surface of the nanocrystals is reduced or oxidized to in a state where the nanocrystals are coordinated by an organic dispersant and further comprising dispersing the nanocrystals in a solvent having an affinity with the dispersant.

6. (Currently Amended) The method according to claim 54, wherein the dispersant is at least one compound selected from the group consisting of C2-18 alkylcarboxylic acids, C2-18 alkenylcarboxylic acids, C_{2-18} alkylsulfonic acids, C_{2-18} alkenylsulfonic acids, C_{2-18} phosphonic acids, C_{2-18} alkylamines, C_{2-18} alkenylamines and the salts thereof.

7. (Currently Amended) The method according to claim 65, wherein the dispersant is at least one compound selected from the group consisting of oleic acid, stearic acid, palmitic acid, hexylphosphonic acid, n-octylphosphonic acid, tetradecylphosphonic acid, octadecylphosphonic acid, n-octyl amine and hexadecyl amine.

8. (Original) The method according to claim 1, wherein the nanocrystals and the reducing agent are mixed in a weight ratio of 1:10-10:1.

9. (Original) The method according to claim 1, wherein the surface treatment of the nanocrystals is carried out in the range of 0-100°C.

10. (Original) The method according to claim 1, wherein the surface treatment of the nanocrystals is carried out for 1 second to 2 days.

11. (Original) The method according to claim 1, wherein the nanocrystals have a shape or mixed shape of a sphere, a rod, a tripod, a tetrapod, a cube, a box or a star.

12. (Original) The method according to claim 1, wherein the nanocrystals have sizes of 1-50mm.

13. (Original) A semiconductor nanocrystal prepared by the method of claim 1.

14. (Currently Amended) An organic electroluminescent device comprising a plurality of organic and inorganic layers including a luminescent layer, wherein the luminescent layer comprises the semiconductor nanocrystals of claim 13~~12~~.

15. (Original) A semiconductor nanocrystal having a chemically reduced or oxidized surface.

16. (New) The method according to claim 4, wherein the reducing agent is selected from a group consisting of sodium borohydride, lithium borohydride, lithium aluminum hydride, hydrazine, hydrogen gas, hydrogen sulfide or ammonia.